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## STORK TWIN CITY TESTING CORPORATION 662 Cromwell Avenue St. Paul, Minnesota 55114

# BODY INTERFACE PRESSURE IMAGING TEST CONDUCTED ON A "LATEX CORE" MATTRESS

Prepared for:
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Export Processing Zone
Biyagama, Malwana, Sri-Lanka

**Client Purchase Order Number: Prepaid** 

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Reviewed by:

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The test results contained in this report pertain only to the samples submitted for testing and not necessarily to all similar products.



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### **BODY INTERFACE PRESSURE IMAGING TEST**

### **INTRODUCTION:**

This report documents the results of interface pressure imaging conducted on a "Latex Core" Mattress submitted by Richard Pieris Natural Foams Ltd. This work was requested by Ms. Ruwani Rajakaruna of Richard Pieris natural Foams Ltd with the testing and data analysis completed March 27, 2006.

### **TEST RESULTS SUMMARY:**

### "Standard Pad" Mattress – Interface Pressures (mm Hg)

	Subject	(1)	(2)	(3)	ALL
Scapula	Maximum	33	41	35	41
	Average	20	23	22	22
	St.Deviation	4.3	5.4	3.2	4.6
Sacral	Maximum	38	37	37	38
Prominence	Average	30	31	31	31
	St.Deviation	4.3	3.4	3.2	3.7
Heel	Maximum	64	75	39	75
	Average	21	22	16	20
	St.Deviation	17.3	20.2	10.4	16.3
Trochanter	Maximum	69	91	88	91
	Average	52	56	58	55
	St.Deviation	6.6	12.0	16.9	12.7

It is the policy of Stork Twin City Testing Corporation (Stork/TCT) to use recognized test procedures whenever possible, such as ASTM, ANSI, ISO etc. To TCT's knowledge, no standard procedure exists for interface body contact pressure testing at the present time. The test method employed for this analysis is based on sound laboratory practice. The equipment used for the evaluation was calibrated and used in accordance with the manufacturer's specifications.

### **SAMPLE IDENTIFICATION:**

One "Latex Core" Mattress was submitted for testing. The physical properties of the unit are listed below:





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### **TEST PROCEDURE:**

An Xsensor pressure imaging system was employed for conducting this evaluation. The mattress was placed onto a sturdy laboratory surface. Three subjects were used for the analysis and selected according to specific weight and height ranges. The subjects were dressed in an appropriate size cotton sweat suit with no shoes to ensure optimum contact with the full surface sensor matrix. Two positions were employed: back lying and ninety degree side lying – the subjects acclimated into the mattress for five minutes prior to the measurement (see color pressure maps at the end of this report). The subjects weight, height and gender are listed below:

<u>Subject</u>	<u>Height</u>	<u>Weight</u>	<u>Sex</u>
1	5' 4"	125 lbs	F
2	5' 6"	180 lbs	M
3	6' 1"	205 lbs	M

#### **REMARKS**:

The maximum values were obtained from each individual pressure point. A 4" by 5" area representing 63 individual sensors was used to isolate and average the pressure points. As a result, out of a possible 63 pressure readings the maximum values were determined by the highest pressure reading per body location.

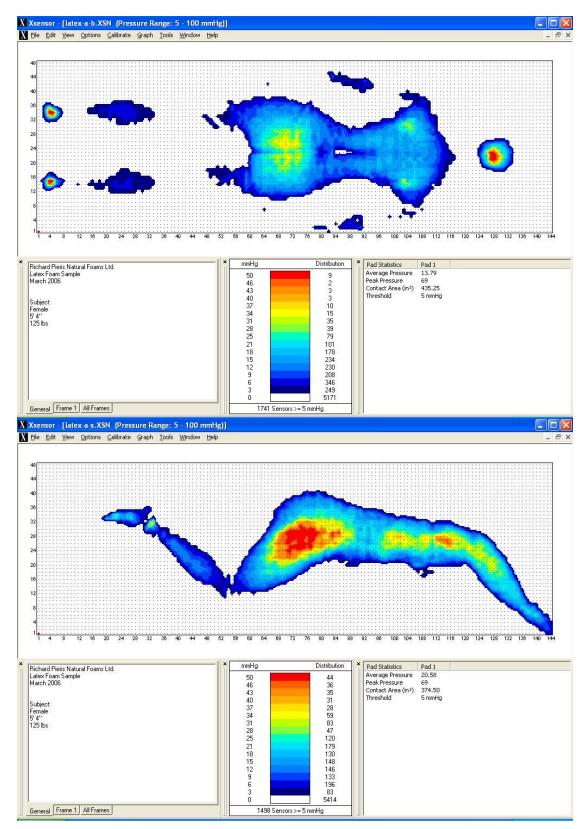
The test sample(s) will be discarded 15 days from the issue date of this report unless otherwise notified.



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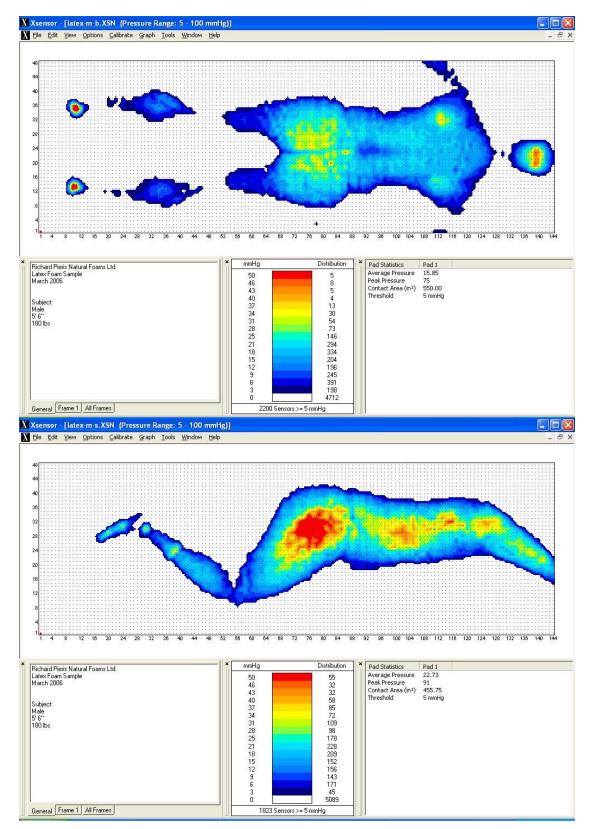
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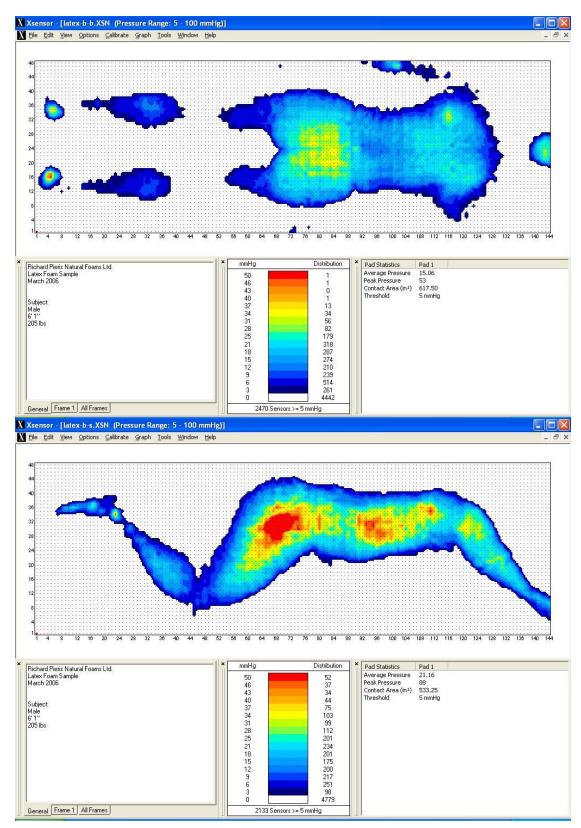
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